

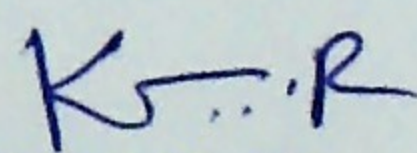


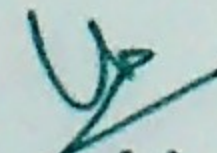
Date: 18-04-2018

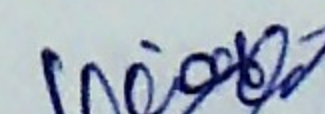
TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	26.57 %	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	27.13 %	Not more than 35.0 %
3.	Water absorption, %	0.38 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2


KIRAN. R
M.E, (Civil-Engg)


For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-W4

Date: 20-04-2018

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2.Improvement of road and drain at Sharadanagara in ward no.04.
3.Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

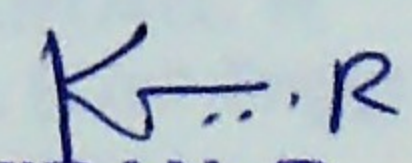
TEST RESULTS

1. Gradation Test:

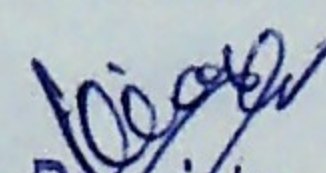
TABLE 1.1

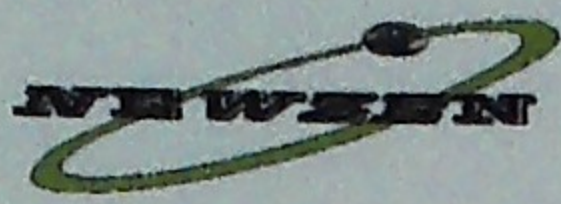
Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	98.50	95-100
26.50	---	-
22.40	75.80	60-80
11.20	57.45	40-60
4.75	34.35	25-40
2.36	23.05	15-30
0.600	18.55	8-22
0.075	3.75	0-5

Page No. 1/2,


KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor

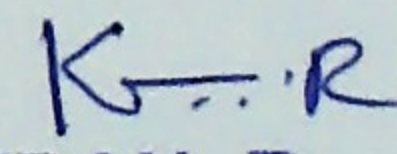


Date: 20-04-2018

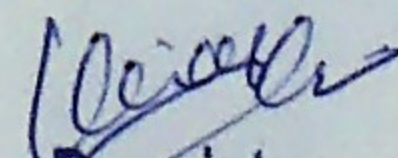
TABLE 1.2

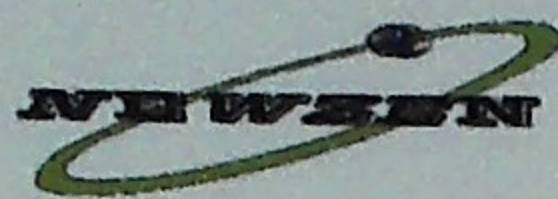
SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	25.46 %	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	26.97 %	Not more than 35.0 %
3.	Water absorption, %	0.38 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2


KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-W5

Date: 23-04-2018

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2.Improvement of road and drain at Sharadanagara in ward no.04.

3.Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	97.35	95-100
26.50	---	-
22.40	74.10	60-80
11.20	56.80	40-60
4.75	34.15	25-40
2.36	26.55	15-30
0.600	19.80	8-22
0.075	4.65	0-5

Page No. 1/2,

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

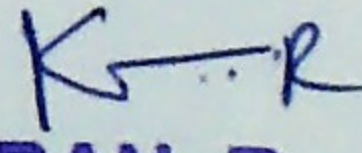


Date: 23-04-2018

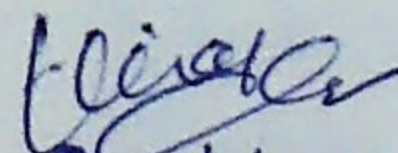
TABLE 1.2

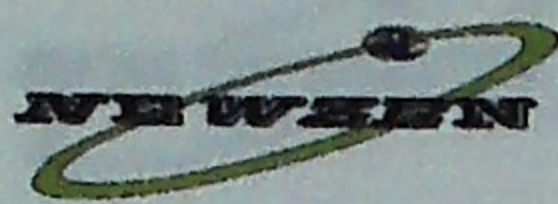
SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	26.03 %	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	27.76 %	Not more than 35.0 %
3.	Water absorption, %	0.38 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2


KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-W6

Date: 25-04-2018

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2.Improvement of road and drain at Sharadanagara in ward no.04.

3.Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

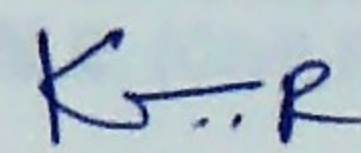
TEST RESULTS

1. Gradation Test:

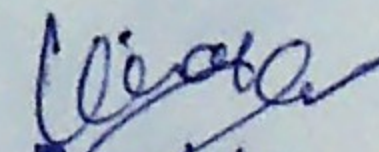
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	96.65	95-100
26.50	---	-
22.40	73.05	60-80
11.20	57.45	40-60
4.75	38.10	25-40
2.36	23.55	15-30
0.600	18.30.	8-22
0.075	4.65	0-5

Page No. 1/2,


KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor

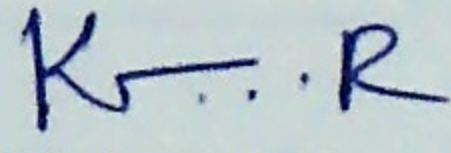


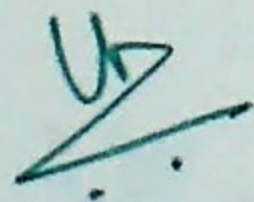
Date: 25-04-2018

TABLE 1.2

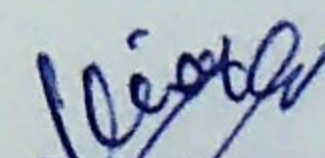
SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	25.43 %	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	26.78 %	Not more than 35.0 %
3.	Water absorption, %	0.37 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2


KIRAN. R
M.E, (Civil-Engg)



For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-W7

Date: 27-04-2018

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2.Improvement of road and drain at Sharadanagara in ward no.04. 3.Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	97.45	95-100
26.50	---	-
22.40	74.30	60-80
11.20	52.80	40-60
4.75	37.55	25-40
2.36	25.90	15-30
0.600	19.15	8-22
0.075	4.25	0-5

Page No. 1/2,

K. R.
KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor



Date: 27-04-2018

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	26.64 %	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	27.43 %	Not more than 35.0 %
3.	Water absorption, %	0.38 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2

K.R.
KIRAN. R
M.E, (Civil-Engg)

U

Newzen Consultants Bangalore

Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-BD1

Date: 03-05-2018

1. TEST REPORT ON BITUMEN SAMPLE:

Sub: Testing of Bitumen sample VG-30 Grade used in Dense Graded Bituminous Macadam.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2.Improvement of road and drain at Sharadanagara in ward no.04.

3.Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

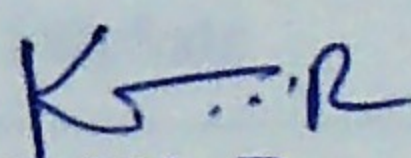
Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

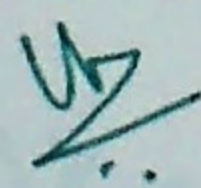
Technical Reference: Ministry of Road Transport and Highways, V Revision, 2013 and IS 73: 1992.

TABLE 1.1 ;

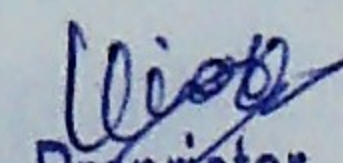
SL No	Details	Test Results	Requirements as per I.S 73 -1992 Specifications
1.	Penetration at 25 ⁰ C	54.00 ⁰ C	Min. 45
2.	Ductility Value at 25 ⁰ C	119 cm	40
3.	Flash point	238 ⁰ C	Minimum 220 ⁰ C
4.	Softening point	52.65 ⁰ C	Min. 47

Page No. 1/1,


KIRAN. R
M.E, (Civil-Engg)



For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-CD1

Date: 03-05-2018

1. TEST REPORT ON COARSE AGGREGATE:

Sub: Testing of Coarse Aggregate used in Dense Graded Bituminous Macadam.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2.Improvement of road and drain at Sharadanagara in ward no.04. 3.Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

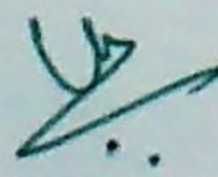
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

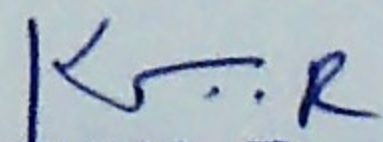
Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

TABLE 1.1;

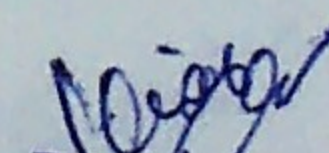
SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	25.02%	Not more than 27.00 % for DBM
2.	Combined Flakiness and Elongation index, %	26.58 %	Not more than 35.0 %
3.	Water absorption, %	0.36 %	Not more than 2.0 %
4.	Specific gravity	2.58	-----
5.	Soundness	5.79 %	Max. 12 % in Sodium Sulphate

Page No. 1/1,




KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor.



NZ/QC/YPD/T&F-W3/2018-19/P4-DM1

Date: 05-05-2018

1. TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2. Improvement of road and drain at Sharadanagara in ward no.04. 3. Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

TEST RESULTS

A. Type of Construction : Dense Graded Bituminous Macadam.

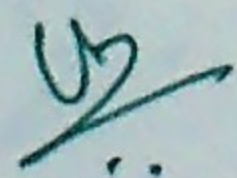
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.53 %**

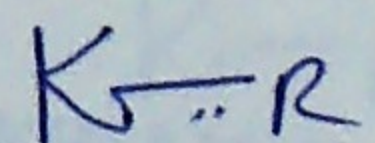
2. Gradation Test

TABLE 1.1

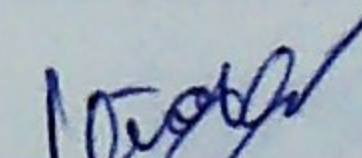
Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specifications- 2013 DBM (Grading - 2)
37.5	100	100
26.5	98.35	90-100
19.0	89.45	71-95
13.20	72.25	56-80
4.75	48.15	38-54
2.36	36.20	28-42
0.300	19.60	7-21
0.075	6.10	2-8

Page No. 1/1




KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-DS1

Date: 07-05-2018

1. TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2. Improvement of road and drain at Sharadanagara in ward no.04. 3. Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

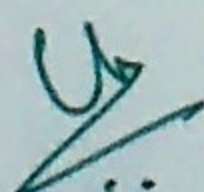
Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

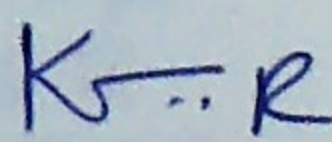
TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

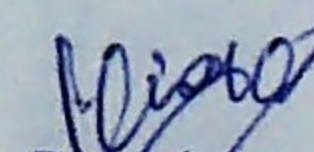
Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1186	900
2	Marshall Flow at 60°C, mm.	3.23	2.0 - 4.0

Page No. 1/1




KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-DM2

Date: 07-05-2018

1. TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2. Improvement of road and drain at Sharadanagara in ward no.04. 3. Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

TEST RESULTS

A. Type of Construction : Dense Graded Bituminous Macadam.

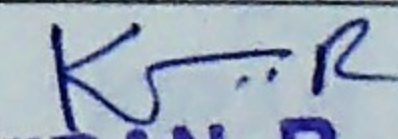
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.51 %**

2. Gradation Test

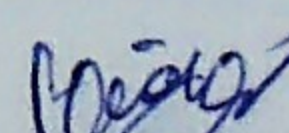
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specifications- 2013 DBM (Grading - 2)
37.5	100	100
26.5	97.25	90-100
19.0	85.45	71-95
13.20	72.05	56-80
4.75	49.65	38-54
2.36	37.25	28-42
0.300	17.60	7-21
0.075	6.80	2-8

Page No. 1/1


KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore


Proprietor



NZ/QC/YPD/T&F-W3/2018-19/P4-DS2

Date: 08-05-2018

1. TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: **Package-4** 1. Improvement of road and 10th 11th 13th main roads at Judicial layout in ward no 04. 2. Improvement of road and drain at Sharadanagara in ward no.04.
3. Improvement of roads and drains balance main and cross roads of A sector in ward no 04.}

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Naveen Rao N (M/s Nischal Constructions)

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1175	900
2	Marshall Flow at 60°C, mm.	3.24	2.0 - 4.0

Page No. 1/1

K. R.
KIRAN. R
M.E, (Civil-Engg)

Proprietor